Amendments to the Claims

This listing of claims will replace all prior versions, all listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A transceiver of a communication system, comprising:

a front-end receiver for generating a first signal with a pre-cursor component and a post-cursor component according to a receiving signal, wherein the front-end receiver further includes an inverse partial response (IPR) filter to compensate an ISI introduced by a partial response filter in a transmitter part of a remote transceiver and an analog-to-digital (A/D) converter to receive [[the]] an output signal of the IPR filter and convert the output signal to the first signal with a digital format;

a noise canceller coupled to the front-end receiver for generating a second signal through eliminating the noise of the first signal;

a Feed-Forward Equalizer (FFE) coupled to the noise canceller for generating a third signal through eliminating the pre-cursor component in the second signal according to a transfer function including a plurality of adjustable constants, wherein the adjustable constants includes a main-tap and the value of the main-tap is predetermined; and

a decoder coupled to the FFE for decoding the third signal and eliminating the post-cursor component in the third signal.

Claim 2 (Original): The transceiver as claimed in claim 1, wherein the front-end receiver further includes a sample-and-hold circuit to sample and hold the receiving signal.

Claim 3 (Currently Amended): The transceiver as claimed in claim 2, wherein the transceiver further includes a timing recovery coupled to the decoder for controlling the sample-and-hold circuit according to [[the]] an output signal of the decoder.

Claim 4 (Original): A front-end receiver of the communication system, comprising:

a sample and hold (S/H) circuit for sampling and holding a receiving signal;

an inverse partial response (IPR) filter coupled to the S/H circuit for generating a filtered receiving signal according to the sample-and-hold receiving signal through compensating an ISI introduced by a partial response filter in a transmitter part of a remote transceiver; and

an analog-to-digital converter (ADC) for generating a digital-form signal according to the filtered receiving signal.

Claim 5 (Original): The receiver as claimed in claim 4, wherein the IPR filter is an infinite impulse response filter.

Claim 6 (Currently Amended): The receiver as claimed in claim 5, further comprising:

a low pass filter (LPF) for filtering high frequency part of the receiving signal.

Claim 7 (Currently Amended): The receiver as claimed in claim 6, further comprising:

an analog auto-gain controller (AAGC), for adjusting the magnitude of the receiving signal to meet the operating range requirement of the LPF.

Claim 8 (New): The transceiver as claimed in claim 1, wherein the IPR filter is an infinite impulse response filter.